

***What Is Claimed Is:***

1        1.        A method for establishing a virtual circuit from a client to one of a  
2        plurality of servers through a network, comprising the steps of:

3                (1)        receiving a request for connection from a client, wherein said  
4        request specifies a functional group, and wherein said functional group includes  
5        a plurality of servers, each capable of servicing said client;

6                (2)        selecting a server from said functional group;

7                (3)        computing a route to said server; and

8                (4)        establishing a virtual circuit from said client to said server via said  
9        route.

1        2.        The method of claim 1, wherein said step of selecting a server further  
2        comprises selecting an operational server from said functional group which has  
3        the highest available computational power.

1        3.        The method of claim 1, wherein said client is a telephone switching  
2        system.

1        4.        The method of claim 1, wherein said network is an ATM network.

1        5.        The method of claim 1, wherein said network is a TCP/IP network.

1        6.        A system for establishing a virtual circuit from a client to one of a  
2        plurality of servers through a network, comprising:

3                an interface module coupled to receive a routing request from the  
4        network, wherein said routing request specifies a functional group and a client,  
5        and wherein said functional group includes a plurality of servers, each capable of  
6        servicing said client;

7 a server module configured to select a server from said functional group;  
8 and  
9 a routing module configured to determine a route from said client to said  
10 server through the network.

1 7. The system of claim 6, wherein said network is an ATM network.

1 8. The system of claim 7, wherein said system further comprises:  
2 a peer group leader module configured to cause the network to elect said  
3 system as a peer group leader.

1 9. The system of claim 6, wherein said server module is configured to select  
2 an operational server from said functional group which has the highest available  
3 computational power.

1 10. The system of claim 6, wherein said server module is further configured  
2 to maintain a list of functional groups within the network.

1 11. The system of claim 6, wherein said client is a telephone switching  
2 system.

1 12. The system of claim 7, wherein each of said plurality of servers responds  
2 to an ATM address for said functional group.

1 13. The system of claim 6, wherein the network is a TCP/IP network.

1 14. A computer program product comprising a computer useable medium  
2 having computer program logic stored therein, wherein said computer program  
3 logic comprises:

4 interface means for enabling a computer to receive a routing request from  
5 a network, wherein said routing request specifies a functional group and a client,  
6 and wherein said functional group includes a plurality of servers, each capable of  
7 servicing said client;

8 server means for enabling said computer to select a server from said  
9 functional group; and

10 routing means for enabling said computer to determine a route from said  
11 client to said server through said network.

1 15. The computer program product of claim 14, wherein said network is an  
2 ATM network.

1 16. The computer program product of claim 14, wherein said network is a  
2 TCP/IP network.

1 17. The computer program product of claim 15, wherein said computer  
2 program logic further comprises:

3 a peer group leader means for enabling said computer to cause said ATM  
4 network to elect said system as a peer group leader.

1 18. The computer program product of claim 14, wherein said server means  
2 enables said computer to select an operational server from said functional group  
3 which has the highest available computational power.

1 19. The computer program product of claim 14, wherein said server means  
2 further enables said computer to maintain a list of functional groups within said  
3 network.

1 20. The computer program product of claim 14, wherein said client is a  
2 telephone switching system.

1 21. The computer program product of claim 15, wherein each of said plurality  
2 of servers responds to an ATM address for said functional group.

1 22. A computer, comprising:  
2 a processor;  
3 interface means for enabling said processor to receive a routing request  
4 from a network, wherein said routing request specifies a functional group and a  
5 client, and wherein said functional group includes a plurality of servers, each  
6 capable of servicing said client;  
7 server means for enabling said processor to select a server from said  
8 functional group; and  
9 routing means for enabling said processor to determine a route from said  
10 client to said server through said network.

1 23. The computer of claim 22, wherein said network is an ATM network.

1 24. The computer of claim 22, wherein said network is a TCP/IP network.

1 25. The computer of claim 23, wherein said computer further comprises:  
2 a peer group leader means for enabling said processor to cause said ATM  
3 network to elect said system as a peer group leader.

1 26. The computer of claim 22, wherein said server means enables said  
2 processor to select an operational server from said functional group which has the  
3 highest available computational power.

1 27. The computer of claim 22, wherein said server means further enables said  
2 processor to maintain a list of functional groups within said network.

1 28. The computer of claim 22, wherein said client is a telephone switching  
2 system.

1 29. The computer of claim 23, wherein each of said plurality of servers  
2 responds to an ATM address for said functional group.

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